

008953



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13813

C45

Job Sheet 191758



Part No: C45

Job Qty: 1 pcs

Part Name: C-Series Remote Hook 4,500 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/7/19

Job Tracking No:

Due Date: 4/30/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: C45 REV.2 IPP REV:A 18.01.29 NEW ISSUE DD VERF:DP

Ship Via:

## Bill of Materials

## Job Routing

| Op No | Operation                   | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier     |           | Sign-off   |
|-------|-----------------------------|-------|------------|----------|-----------|---------|-------------------------|-----------|------------|
|       |                             |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier   | Lead Time |            |
| 100   | External Load - 1           | 1 pcs | 4/30/19    |          | 0.00      | 3.33    | External Load - 1       |           | AP         |
|       |                             |       |            |          |           |         | External Load - 2       |           | Michael    |
|       |                             |       |            |          |           |         | External Load - 3       |           |            |
| 110   | External Load - 2 - B4B     | 1 pcs | 4/30/19    |          | 0.00      | 3.33    | External Load - 1 - B4B |           | AP         |
|       |                             |       |            |          |           |         | External Load - 2 - B4B |           | 2019/05/02 |
|       |                             |       |            |          |           |         | External Load - 3 - B4B |           | Michael    |
| 120   | QC 5                        | 1 pcs | 4/30/19    |          | 0.00      | 0.00    | QC 5 - 10               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 12               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 17               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 18               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 19               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 22               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 24               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 3                |           |            |
|       |                             |       |            |          |           |         | QC 5 - 42               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 43               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 49               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 51               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 58               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 68               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 9                |           |            |
|       |                             |       |            |          |           |         | QC 5 - 50               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 30               |           |            |
|       |                             |       |            |          |           |         | QC 5 - 40               |           |            |
| 130   | Packaging 3-2 - Stock - B4B | 1 pcs | 4/30/19    |          | 0.00      | 0.00    | Packaging 3 - 1 - B4B   |           |            |
|       |                             |       |            |          |           |         | Packaging 3 - 2 - B4B   |           |            |
|       |                             |       |            |          |           |         | Packaging 3 - 3 - B4B   |           |            |
|       |                             |       |            |          |           |         | Packaging 3 - 4 - B4B   |           |            |
|       |                             |       |            |          |           |         | Packaging 3 - 5 - B4B   |           |            |
|       |                             |       |            |          |           |         | Packaging 3 - 6 - B4B   |           |            |
|       |                             |       |            |          |           |         | Packaging 3 - 7 - B4B   |           |            |



Container No: S167659



Part: C45

Job No: 191758

Serial No/Batch: S167659

Revision: 2

Inspector:

Exp Date:

Instructions:

Date: 03/28/19

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|     |            |       |         |                        |                 |
|-----|------------|-------|---------|------------------------|-----------------|
|     |            |       |         | Packaging 3 - 8 - B4B  |                 |
|     |            |       |         | Packaging 3 - 9 - B4B  |                 |
|     |            |       |         | Packaging 3 - 10 - B4B |                 |
|     |            |       |         | Packaging 3 - 11 - B4B |                 |
|     |            |       |         | Packaging 3 - 12 - B4B |                 |
|     |            |       |         | Packaging 3 - 13 - B4B |                 |
|     |            |       |         | Packaging 3 - 14 - B4B |                 |
|     |            |       |         | Packaging 3 - 15 - B4B |                 |
|     |            |       |         | Packaging 3 - 16 - B4B |                 |
|     |            |       |         | Packaging 3 - 17 - B4B |                 |
|     |            |       |         | Packaging 3 - 18 - B4B |                 |
|     |            |       |         | Packaging 3 - 19 - B4B |                 |
|     |            |       |         | Packaging 3 - 20 - B4B |                 |
|     |            |       |         | Packaging 3 - 21 - B4B |                 |
|     |            |       |         | Packaging 3 - 22 - B4B |                 |
|     |            |       |         | Packaging 3 - 23 - B4B |                 |
|     |            |       |         | Packaging 3 - 24 - B4B |                 |
|     |            |       |         | Packaging 3 - 25 - B4B |                 |
|     |            |       |         | Packaging 3 - 26 - B4B |                 |
|     |            |       |         | Packaging 3 - 27 - B4B |                 |
|     |            |       |         | Packaging 3 - 28 - B4B |                 |
|     |            |       |         | Packaging 3 - 29 - B4B |                 |
|     |            |       |         | Packaging 3 - 30 - B4B |                 |
|     |            |       |         | Packaging 3 - 31 - B4B |                 |
|     |            |       |         | Packaging 3 - 32 - B4B |                 |
|     |            |       |         | Packaging 3 - 33 - B4B |                 |
|     |            |       |         | Packaging 3 - 34 - B4B |                 |
|     |            |       |         | Packaging 3 - 35 - B4B |                 |
|     |            |       |         | Packaging 3 - 36 - B4B |                 |
| 140 | QC 21 - SA | 1 pcs | 4/30/19 | 0.00 0.00              | QC 21 - SA - 21 |
|     |            |       |         |                        | QC 21 - SA - 70 |
|     |            |       |         |                        | QC 21 - SA - 53 |

DAS  
21  
8-89

MAY 02 2019

Part Op 100 - 1- PICK C45-2-1 AND LASER ENGRAVE AS PER DWG . SEE NOTE 3 AND 4 ON SHEET 3. 2- ASSEMBLE AS  
Descriptions: PER DWG 3- PERFORM ALL NECESSARY TEST USING FAI TEST SHEET.

110 - 1- PICK C45-2-1 AND LASER ENGRAVE AS PER DWG . SEE NOTE 3 AND 4 ON SHEET 3. 2- ASSEMBLE AS  
PER DWG 3- PERFORM ALL NECESSARY TEST USING FAI TEST SHEET.

120 - (QC5- Inspect part completeness to step on W/O)

130 - Identify as per dwg & Stock Location: \_\_\_\_\_)

140 - (QC21- Final Inspection - Work Order Release)

## Job BOM

| Part / Item         | Component Name            | Quantity     | Operation                   | Container |
|---------------------|---------------------------|--------------|-----------------------------|-----------|
| 188-FPSS-1/4-20-3/8 | Set Screw                 | 2 Ea (2 ea)  | 100-External Load - 1       | 5048557-1 |
| 188-FSCS-1032-5/8   | Set Screw                 | 4 Ea (4 ea)  | 110-External Load - 2 - B4B | 5047611   |
| 2595K2 7856 K75     | Heat Shrink               | 1 ft (1 ea)  | 110-External Load - 2 - B4B | 5049360   |
| 32448               | 16-14 AWG Knife Connector | 2 Ea (2 ea)  | 110-External Load - 2 - B4B | 5151 100  |
| 600.1309-A          | Label                     | 1 pcs (1 ea) | 110-External Load - 2 - B4B |           |
| 600.1312            | Caution Sticker           | 1 pcs (1 ea) | 110-External Load - 2 - B4B |           |
| AN4-23A             | Bolt                      | 2 Ea (2 ea)  | 110-External Load - 2 - B4B | F123434-1 |
| AN5-21A             | Bolt                      | 4 Ea (4 ea)  | 110-External Load - 2 - B4B | 5097081-1 |
| C10-41              | Strain Relief Connector   | 1 Ea (1 ea)  | 110-External Load - 2 - B4B | 5083917   |
| C2-14-2             | Label Rivets              | 2 Ea (2 ea)  | 110-External Load - 2 - B4B |           |
| C45-1-1 P           | Manual Knob Release       | 1 pcs (1 ea) | 110-External Load - 2 - B4B | 5029295   |
| C45-10-1 P          | Lock Spring Pin           | 1 Ea (1 ea)  | 110-External Load - 2 - B4B | 5029293   |
| C45-10-2            | Lock Spring               | 1 pcs (1 ea) | 110-External Load - 2 - B4B | 5135 379  |
| C45-11-1            | Sideplate, Solenoid Side  | 1 pcs (1 ea) | 110-External Load - 2 - B4B | 5164685   |
| C45-11-2            | Locating Pin              | 2 Ea (2 ea)  | 110-External Load - 2 - B4B | 5089115   |
| C45-12-1            | Lock Bushing              | 2 pcs (2 ea) | 110-External Load - 2 - B4B | 5152223   |
| C45-12-2            | Lock Shaft                | 1 pcs (1 ea) | 110-External Load - 2 - B4B | 5046506   |
| C45-12-3            | Lock                      | 1 pcs (1 ea) | 110-External Load - 2 - B4B | 5083337   |
| C45-12-4            | Lock Roller               | 1 pcs (1 ea) | 110-External Load - 2 - B4B | 5108073   |



|             |               |                                       |              |                               |            |
|-------------|---------------|---------------------------------------|--------------|-------------------------------|------------|
|             | C45-12-5      | Lock Roller Pin                       | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5093 171   |
|             | C45-12-6 P    | Retaining Ring                        | 2 Ea (2 ea)  | 110-External Load - 2 - B4B * | 5029 303   |
|             | C45-13-1      | Keeper Bushing                        | 2 pcs (2 ea) | 110-External Load - 2 - B4B   | 5125 630   |
|             | C45-13-2      | Teflon Keeper, Spacer                 | 2 Ea (2 ea)  | 110-External Load - 2 - B4B   | 5040 660   |
|             | C45-13-3      | Keeper Shaft                          | 1 Ea (1 ea)  | 110-External Load - 2 - B4B   | 5157 825   |
|             | C45-13-4      | Keeper                                | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5170 614   |
|             | C45-13-5      | Keeper Spring                         | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5029 308   |
|             | C45-2-1       | Sideplate - MRK                       | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5148 693   |
|             | C45-3-1       | Radial Bearing                        | 2 Ea (2 ea)  | 110-External Load - 2 - B4B   | 5097 909   |
|             | C45-3-10      | Latch Shaft                           | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5041 144   |
|             | C45-3-11      | Actuator                              | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5042 953   |
|             | C45-3-12      | Latch Roller Bearing                  | 1 Ea (1 ea)  | 110-External Load - 2 - B4B   | 5097 903   |
|             | C45-3-2       | Latch Roller Pin                      | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5029 316   |
|             | C45-3-2-1     | Snap Ring                             | 2 Ea (2 ea)  | 110-External Load - 2 - B4B   | 5097 898   |
|             | C45-3-3       | Latch Roller                          | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5127 763   |
|             | C45-3-4       | Pin                                   | 2 pcs (2 ea) | 110-External Load - 2 - B4B   | 5133 668   |
|             | C45-3-4-1     | Retaining Ring                        | 4 Ea (4 ea)  | 110-External Load - 2 - B4B   | 5114 803   |
|             | C45-3-5 P     | Teflon Spacer                         | 2 Ea (2 ea)  | 110-External Load - 2 - B4B * | 5029 321   |
|             | C45-3-6       | Latch                                 | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5123 057   |
|             | C45-3-7       | Link                                  | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5029 322   |
|             | C45-3-8A      | Actuator Shaft Bushing                | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5078 570   |
|             | C45-3-8B      | Actuator Shaft Bushing                | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5163 197   |
|             | C45-3-9       | Lever Spring                          | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5089 530   |
|             | C45-4-1-Po    | Trunnion Bushing                      | 2 pcs (2 ea) | 110-External Load - 2 - B4B * | 5122 724   |
|             | C45-4-4A      | C45 Load Beam Assembly                | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5043 675   |
|             | C45-4-5       | Loadbeam Spacer                       | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5163 562   |
|             | C45-5-1       | Lever Stop Pin                        | 1 Ea (1 ea)  | 110-External Load - 2 - B4B   | 5040 657   |
|             | C45-5-2       | Lever Stop                            | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5029 330   |
|             | C45-7-1       | LOADBEAM BUMPER                       | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5156 421   |
|             | C45-7-2       | Lock Bumper                           | 2 pcs (2 ea) | 110-External Load - 2 - B4B   | 5163 721   |
|             | C45-8-1-2     | Solenoid Nut                          | 2 pcs (2 ea) | 110-External Load - 2 - B4B   | 5163 995   |
|             | C45-8-2       | Solenoid                              | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5157 835   |
|             | C45-8-4       | Solenoid Cover Gasket                 | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5171 779   |
|             | C45-8-5       | Solenoid Cover                        | 1 pcs (1 ea) | 110-External Load - 2 - B4B * | 5046 392   |
|             | C45-9-1       | Clock Spring Cover                    | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5029 337   |
|             | C45-9-2       | Clock Spring                          | 1 pcs (1 ea) | 110-External Load - 2 - B4B   | 5107 946   |
|             | EL-PLUG-M     | 3-Prong Male Spade Plug               | 1 Ea (1 ea)  | 110-External Load - 2 - B4B   | 5161 539   |
| 01004-08-04 | EL344-8-TOW   | Long Line Electrical Wire, 14/3 Gauge | 1 ft (1 ea)  | 110-External Load - 2 - B4B   | 5159 114   |
|             | MS21044N5     | Nut                                   | 4 Ea (4 ea)  | 110-External Load - 2 - B4B * | 5097 089   |
|             | MS27039-4-08  | Screw                                 | 1 Ea (1 ea)  | 110-External Load - 2 - B4B   | 5039 330-1 |
|             | NAS1149F0463P | Washer                                | 3 Ea (3 ea)  | 110-External Load - 2 - B4B * | 5097 088   |
|             | NAS1149F0563P | Washer                                | 8 Ea (8 ea)  | 110-External Load - 2 - B4B   | 5098 031-2 |

GREASE AEROSTELL DO.7 (S138964)

LOCTITE 620 (M166705)

LOCTITE 242 (M138933)

SAF-T-EZE (M128063)

## Job Allocations

| Operation                   | Component Part      | Required | Inventory | Allocated |
|-----------------------------|---------------------|----------|-----------|-----------|
| 100-External Load - 1       | 188-FPSS-1/4-20-3/8 | 2        | 122       | 0         |
| 110-External Load - 2 - B4B | 188-FSCS-1032-5/8   | 4        | 106       | 0         |
|                             | 2595K2              | 1        | 19        | 0         |
|                             | 32448               | 2        | 219       | 0         |
|                             | 600.1309-A          | 1        | 97        | 0         |
|                             | 600.1312            | 1        | 19        | 0         |
|                             | AN4-23A             | 2        | 690       | 0         |
|                             | AN5-21A             | 4        | 364       | 0         |
|                             | C10-41              | 1        | 28        | 0         |
|                             | C2-14-2             | 2        | 188       | 0         |
|                             | C45-1-1             | 1        | 7         | 0         |
|                             | C45-10-1            | 1        | 162       | 0         |
|                             | C45-10-2            | 1        | 11        | 0         |
|                             | C45-11-1            | 1        | 0         | 0         |
|                             | C45-11-2            | 2        | 43        | 0         |
|                             | C45-12-1            | 2        | 15        | 0         |
|                             | C45-12-2            | 1        | 5         | 0         |
|                             | C45-12-3            | 1        | 11        | 0         |
|                             | C45-12-4            | 1        | 19        | 0         |
|                             | C45-12-5            | 1        | 47        | 0         |
|                             | C45-12-6            | 2        | 114       | 0         |
|                             | C45-13-1-PO         | 2        | 0         | 0         |
|                             | C45-13-2            | 2        | 70        | 0         |
|                             | C45-13-3            | 1        | 8         | 0         |
|                             | C45-13-4            | 1        | 0         | 0         |
|                             | C45-13-5 P          | 1        | 0         | 0         |
|                             | C45-2-1             | 1        | 3         | 0         |
|                             | C45-3-1             | 2        | 121       | 0         |
|                             | C45-3-10            | 1        | 9         | 0         |
|                             | C45-3-11            | 1        | 5         | 0         |
|                             | C45-3-12            | 1        | 86        | 0         |
|                             | C45-3-2 P           | 1        | 0         | 0         |
|                             | C45-3-2-1           | 2        | 93        | 0         |
|                             | C45-3-3             | 1        | 25        | 0         |
|                             | C45-3-4             | 2        | 60        | 0         |
|                             | C45-3-4-1           | 4        | 165       | 0         |
|                             | C45-3-5             | 2        | 99        | 0         |
|                             | C45-3-6             | 1        | 4         | 0         |
|                             | C45-3-7 P           | 1        | 0         | 0         |
|                             | C45-3-8A            | 1        | 30        | 0         |
|                             | C45-3-8B            | 1        | 5         | 0         |
|                             | C45-3-9             | 1        | 31        | 0         |
|                             | C45-4-1             | 2        | 16        | 0         |
|                             | C45-4-4A            | 1        | 4         | 0         |
|                             | C45-4-5             | 1        | 4         | 0         |
|                             | C45-5-1             | 1        | 46        | 0         |
|                             | C45-5-2 P           | 1        | 0         | 0         |
|                             | C45-7-1             | 1        | 18        | 0         |
|                             | C45-7-2             | 2        | 4         | 0         |
|                             | C45-8-1-2           | 2        | 0         | 0         |
|                             | C45-8-2             | 1        | 6         | 0         |
|                             | C45-8-4             | 1        | 9         | 0         |
|                             | C45-8-5             | 1        | 19        | 0         |
|                             | C45-9-1 P           | 1        | 0         | 0         |
|                             | C45-9-2             | 1        | 45        | 0         |
|                             | EL-PLUG-M           | 1        | 31        | 0         |
|                             | EL314-SJTOW         | 1        | 718       | 0         |
|                             | MS21044N5           | 4        | 89        | 0         |
|                             | MS27039-4-08        | 1        | 229       | 0         |
|                             | NAS1149F0463P       | 3        | 563       | 0         |
|                             | NAS1149F0563P       | 8        | 433       | 0         |

## Part Specifications

Specifications could not be found.

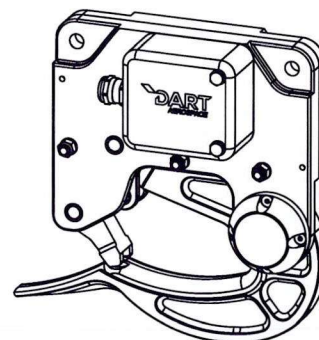
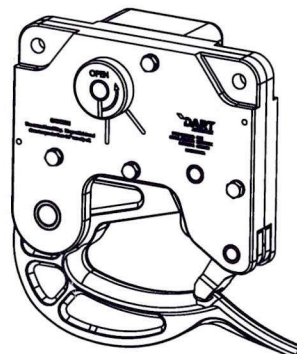
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| ASSY QTY | ASSY QTY | B/O | Part #             | UNIT QTY | Description                          | Material         | B/O INFORMATION OR SPECIFICATIONS             | PG. |
|----------|----------|-----|--------------------|----------|--------------------------------------|------------------|-----------------------------------------------|-----|
|          |          |     | C45-1-1            | 1        | MANUAL KNOB RELEASE                  | 6061             |                                               | 2   |
|          |          |     | C45-2-1            | 1        | SIDE PLATE                           | 7075-T6          |                                               | 2   |
|          |          | B/O | C45-3-1            | 2        | RADIAL BEARING                       |                  | (KAMAN #1606 2R5)                             | 3   |
|          |          |     | C45-3-2            | 1        | LATCH ROLLER PIN                     | O-1              |                                               | 3   |
|          |          | B/O | C45-3-2-1          | 2        | SNAP RING                            | STEEL            | Ø3/8 (KAMAN 1400-0037)                        | 3   |
|          |          |     | C45-3-3            | 1        | LATCH ROLLER                         | 4140/4142        |                                               | 3   |
|          |          |     | C45-3-4            | 2        | LINK PIN                             | O-1              |                                               | 3   |
|          |          | B/O | C45-3-4-1          | 4        | RETAINING RING                       | BERYLLIUM COPPER | 3/16 SHAFT (MCMMASTER-CARR #98410A110)        | 3   |
|          |          | B/O | C45-3-5            | 2        | SPACER                               | TEFLON           | (MCMMASTER-CARR #95606A180)                   | 3   |
|          |          |     | C45-3-6            | 1        | LATCH                                | 17-4 S.S.        |                                               | 3   |
|          |          |     | C45-3-7            | 1        | LINK                                 | O-1              |                                               | 3   |
|          |          |     | C45-3-8A           | 1        | ACTUATOR SHAFT BUSHING               | AL BRONZE 630    |                                               | 3   |
|          |          |     | C45-3-8B           | 1        | ACTUATOR SHAFT BUSHING SOLENOID SIDE | AL BRONZE 630    |                                               | 3   |
|          |          | B/O | C45-3-9            | 1        | LEVER SPRING                         | 303 S.S.         |                                               | 3   |
|          |          |     | C45-3-10           | 1        | LATCH SHAFT                          | 17-4 S.S.        |                                               | 3   |
|          |          |     | C45-3-11           | 1        | ACTUATOR                             | 17-4 S.S.        |                                               | 3   |
|          |          | B/O | C45-3-12           | 1        | DU BEARING                           |                  | (KAMAN 06DU06)                                | 3   |
|          |          |     | C45-4-1            | 2        | TRUNNION BUSHING                     | AL-BRONZE 630    |                                               | 2   |
|          |          |     | C45-4-5            | 1        | LOAD BEAM SPACER                     | 4140/4142 Q&T    |                                               | 2   |
|          |          | B/O | C45-5-1            | 1        | LEVER STOP PIN                       | STEEL            | 1/4 X 1-3/8 (MCMMASTER-CARR #98381A545)       | 2   |
|          |          |     | C45-5-2            | 1        | LEVER STOP                           | 304 S.S.         |                                               | 2   |
|          |          |     | C45-7-1            | 1        | LOAD BEAM BUMPER                     | POLYURETHANE     |                                               | 2   |
|          |          |     | C45-7-2            | 2        | LOCK BUMPER                          | PLOYURETHANE     |                                               | 2   |
|          |          |     | C45-8-1-2          | 2        | SOLENOID NUT                         | 304 S.S.         |                                               | 2   |
|          |          |     | C45-8-2            | 1        | SOLENOID ASSY                        |                  | (REF: H-2553-020)                             | 2   |
|          |          |     | C45-8-4            | 1        | SOLENOID COVER GASKET                | BLENDED RUBBER   |                                               | 2   |
|          |          |     | C45-8-5            | 1        | SOLENOID COVER                       | 6061             |                                               | 2   |
|          |          |     | C45-9-1            | 1        | CLOCK SPRING COVER                   | 6061             |                                               | 2   |
|          |          |     | C45-4-4A           | 1        | C45 LOAD BEAM ASSY.                  |                  |                                               | 2   |
|          |          | B/O | C45-9-2            | 1        | CLOCK SPRING                         | 303 S.S.         | .03 X .75 X 15 DENDOFF SPRING                 | 2   |
|          |          | B/O | C45-10-1           | 1        | SPRING PIN                           | S.S.             | 1/4 X 1.0 (MCMMASTER-CARR #92373A183)         | 2   |
|          |          |     | C45-10-2           | 1        | LOCK SPRING C45 HOOK                 | 302 S.S.         |                                               | 3   |
|          |          |     | C45-11-1           | 1        | SIDE PLATE SOLENOID                  | 7075-T6          |                                               | 2   |
|          |          | B/O | C45-11-2           | 2        | LOCATING PIN                         | S.S.             | Ø3/16 X 1 (MCMMASTER-CARR #90145A510)         | 2   |
|          |          |     | C45-12-1           | 2        | LOCK BUSHING                         | 4140/4142        |                                               | 3   |
|          |          |     | C45-12-2           | 1        | LOCK SHAFT                           | 4140/4142        |                                               | 3   |
|          |          |     | C45-12-3           | 1        | LOCK                                 | 4140/4142        |                                               | 3   |
|          |          |     | C45-12-4           | 1        | LOCK ROLLER                          | 4140/4142        |                                               | 3   |
|          |          |     | C45-12-5           | 1        | LOCK ROLLER PIN                      | 4140/4142        |                                               | 3   |
|          |          | B/O | C45-12-6           | 2        | RETAINING RING                       | STEEL            | (KAMAN #N1400-0050)                           | 3   |
|          |          |     | C45-13-1           | 2        | KEEPER BUSHING                       | 4140/4142        |                                               | 3   |
|          |          | B/O | C45-13-2           | 2        | SPACER                               | NYLON            | (MCMMASTER-CARR #95606A210)                   | 3   |
|          |          |     | C45-13-3           | 1        | KEEPER SHAFT                         | 4140/4142        |                                               | 3   |
|          |          |     | C45-13-4           | 1        | KEEPER                               | 4140/4142        |                                               | 3   |
|          |          | B/O | C45-13-5           | 1        | KEEPER SPRING                        | 303 S.S.         | CHAMBERLAIN SPRING                            | 3   |
|          |          |     | 600.1309           | 1        | LABEL A                              | ALUMINUM         |                                               | N/S |
|          |          |     | 600.1309-A         | 1        | LABEL A                              | ALUMINUM         |                                               | N/S |
|          |          | B/O | 600.1312           | 1        | CAUTION STICKER A                    |                  |                                               | N/S |
|          |          | B/O | C2-14-2            | 2        | LABEL RIVETS A                       | 18-8 S.S.        | NO 4 (MCMMASTER-CARR #91654A106)              | N/S |
|          |          | B/O | 188-FPS-1/4 20-3/8 | 2        | SET SCREW                            | S.S.             | 1/4-20 (MCMMASTER-CARR #92313A535)            | 2   |
|          |          | B/O | 188-FSCS-1032-5/8  | 4        | SCREW                                | S.S.             | 10-32 X 5/8 FSHCS (MCMMASTER-CARR #92210A303) | 2   |
|          |          | B/O | A4-23A             | 2        | BOLT                                 | STEEL            | 1/4-28 X 2.41                                 | 2   |
|          |          | B/O | ANS-21A            | 4        | BOLT                                 | STEEL            | 5/16-24 X 2.22                                | 2   |
|          |          | B/O | MS21044N5          | 4        | LOCK NUT                             | S.S.             | 5/16                                          | 2   |
|          |          | B/O | AN960-416          | 3        | WASHER                               | STEEL            | 1/4                                           | 2   |
|          |          | B/O | AN960-516          | 8        | WASHER                               | STEEL            | Ø5/16                                         | 2   |
|          |          | B/O | MS27039-4-08       | 1        | BOLT                                 | STEEL            | 1/4-28 X .531                                 | 2   |
|          |          | B/O | EL 314-SJTOW 3/14  | 1        | 3 WIRE                               |                  | (TEXCAN 314-SJTOW 3/14)                       | 2   |
|          |          | B/O | 32448              | 2        | 16-14 AWG KNIFE CONNECTOR            |                  | (ALLIED ELECTRONICS 32448)                    | 2   |
|          |          | B/O | C10-41             | 1        | STRAIN RELIEF CONNECTOR              | BRASS            | 1/2 TRADE SIZE (MCMMASTER-CARR #6907K14)      | 2   |
|          |          | B/O | EL-PLUG-M          | 1        | MALE PLUG                            | PE High Density  | (MCMMASTER-CARR #7216K5)                      | 2   |
|          |          | B/O |                    | 1        | HEAT SHRINK TUBE                     | RUBBER           | (MCMMASTER-CARR #2595K22)                     | N/S |

| REVISIONS |         |                                                                                                                                                                                                                                                                                          |           |         |          |
|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|----------|
| REV       | ECR     | DESCRIPTION                                                                                                                                                                                                                                                                              | DATE      | INITIAL | APPROVED |
| 1         | 15-0018 | UPDATED TO NEW DRAFTING STANDARDS. CHD P/NS TO REFLECT AN & MS NUMBERS. ADDED REBUILD AND CUSTOMER REBUILD NOTES.                                                                                                                                                                        | 1/20/2015 | DPD     | JAG      |
| 2         | 15-0230 | C45-5-1 CHD B/O WAS Ø1/4 X 1-1/2 #98381A546 IS Ø1/4 X 1-3/8 #98381A545. C45-1-2 REPLACED W/ 188-FPS-1/4 20-3/8. C45-9-1-1 REPLACED W/ 188-FSCS-1032-5/8. MS27039-4-10 REPLACED W/ MS27039-4-08. CORD GRIP REPLACED W/ C10-41. 32448 ADDED TO BOM QTY 2. ADDED ENGRAVING NOTES & DETAILS. | 9/10/2015 | DPD     | JAG      |



# NOTES:

- 1 FOR REBUILD ONLY.
- 2 FOR CUSTOMER REBUILD ONLY.

|                                                                                                                                     |                      |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>DART</b><br>AEROSPACE                                                                                                            |                      |
| TITLE<br><b>C45-HOOK</b>                                                                                                            |                      |
| DWG NO.<br><b>C45</b>                                                                                                               | REV<br><b>2</b>      |
| MATERIAL<br>UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>XXX ± .005 FRACTIONS ± 1/8<br>XX ± .01 ANGLES ± .5°<br>X ± .1 |                      |
| DRAWN BY:<br>APPROVED: <i>D. Weil</i>                                                                                               |                      |
| HEAT TREAT<br>FINISH<br>SPEC                                                                                                        |                      |
| 1. BREAK ALL SHARP EDGES .015 x 45°<br>OR .015R<br>2. DIMENSIONAL LIMITS APPLY AFTER PLATING                                        |                      |
| SCALE<br>1:4                                                                                                                        | DATE<br>SHEET 1 OF 3 |

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------|------------------------|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |              |                        |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | MRB (QSI042) |                        |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |              | Completed By           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              | Lead hand / Supervisor |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              |                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              | QC / QA Coordinator    |
| <b>Root Cause</b><br><br><div style="display: flex; flex-direction: column;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |              |                        |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |              |                        |







# Remote Cargo Hook Test Form

C45

Work Order 191758

Customer 13813

Serial Number 5167659

Date 2019-5-1

| # of Releases | Load (Lbs.) | Release Method        | Remarks                                      | Result   | Pass/fail |
|---------------|-------------|-----------------------|----------------------------------------------|----------|-----------|
| 1             | 11,250      | Static Hold           | Hold for two Minutes and reduce load to zero | N/A      | Pass      |
| 10            | 2,250       | Electircal, 25 volts  | No "hang ups" permitted                      | N/A      | Pass      |
| 2             | 4,500       | Electircal, 22 volts  | Current shall not exceed 12.4A               | 9.2 A    | Pass      |
| 2             | 3,500       | Electircal, 22 volts  | Current shall not exceed 12.4A               | 9.1 A    | Pass      |
| 2             | 2,500       | Electircal, 22 volts  | Current shall not exceed 12.4A               | 8.5 A    | Pass      |
| 2             | 1,500       | Electircal, 22 volts  | Current shall not exceed 12.4A               | 8.1 A    | Pass      |
| 2             | 500         | Electircal, 22 volts  | Current shall not exceed 12.4A               | 8.0 A    | Pass      |
| 1             | 4,500       | Electircal, 20 volts  | Current shall not exceed 11.3A               | 7.7 A    | Pass      |
| 1             | 4,500       | Electircal, 28 volts  | Current shall not exceed 15.8A               | 10.7 A   | Pass      |
| 1             | 4,500       | Manual                |                                              | N/A      | Pass      |
| 1             | 4,500       | Impact Test           | Impact shackle 10 times, shall not release   | N/A      | Pass      |
| 1             | N/A         | Solenoid Ohms         | Shall not exceed 1.7-2.0 Ohms                | 2.0 Ohms | Pass      |
| 1             | N/A         | Electircal Continuity | Across both wires                            | N/A      | Pass      |

Test Conducted By: Michel Lalonde  
Technician

Signature: Sybil Parker  
QC 5 Small FAB / QA

**Submit**